

HA

Notice of Allowability

Application No.

10/668,421

Examiner

Erin D. Chiem

Applicant(s)

BERMEL ET AL.

Art Unit

2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the telephonic interview on February 28, 2006 with the applicant.
2. ☒ The allowed claim(s) is/are 1-7,12,13,32,35 and 38.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 2/23/06
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney Stephen Shawn and one of the inventors, Marcus Bermel, on February 23, 2006.

The application has been amended as follows:

- Claim 1. A flexible optical switch film between at least two plates and having an electrical bias between the at least two plates, wherein the flexible optical switching film comprises: a light scattering agent integrated within a porous organic polymeric resin having pores that are formed throughout all of the porous organic polymeric resin, including a contact region between a transparent plate and a light guide plate where light is transmitted.
- Claim 12. An optical displace device, comprising:
- a) a multi-layered flexible, composite film of organic polymeric resins having pores throughout all of the multi-layered flexible, composite film and whose multiple layers are formed simultaneously and coated simultaneously on a carrier substrate, in addition the multi-layered flexible, composite film includes a

Art Unit: 2883

light scattering agent integrated within the composite film of organic polymeric resins and at least one electrically conductive layer; and

b) at least two plates having the multi-layered flexible, composite film between the at least two plates such that the multi-layered flexible, composite film of organic polymeric resins is capable of contacting at least one of the two plates, thus forming an optical switch for the optical display device.

Claim 32. The optical switching film claimed in claim 1, wherein light transmission via the porous film is greater than 50%.

Claim 33. (Cancelled).

Claim 35. The optical device claimed in claim 12, wherein light transmission of the multi-layered composite film is greater than 50%.

Claim 38. A method for fabricating an optical display device, comprising the steps of:

- a) providing a carrier substrate;
- b) coating, onto the carrier substrate, a releasable porous, flexible organic polymeric film having pores and a light scattering agent integrated throughout all of the releasable porous, flexible organic polymeric film;

- c) coating an electrically conductive layer onto the releasable porous, flexible organic polymeric film at the same time as the releasable porous, flexible organic polymeric film is coated onto the carrier substrate; and
- d) assembling the releasable porous, flexible organic polymeric film between at least two electrically biased plates to enable contact with at least one of the electrically biased plates such that an optical switch is constructed for the optical device.

The following is an examiner's statement of reasons for allowance: Claims 1, 12, and 38 are allowable over the prior art of record because the latter, either alone or in combination, does not disclose nor render obvious a flexible optical film between at least two plates and having an electrical bias between the at least two plates wherein the flexible optical switching film comprises a porous organic polymeric resin having pores that are formed through all of the porous organic polymeric resin, including a contact region between a transparent plate and a light guide plate where light is transmitted. The prior art of record does not disclose nor render obvious the instance limitation in combination with the rest of the claimed limitations.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 2883

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erin D. Chiem whose telephone number is (571) 272-3102. The examiner can normally be reached on Monday - Thursday 9AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Erin D Chiem
Examiner
Art Unit 2883



Frank G. Font
Supervisory Primary Examiner
Technology Center 2800